

## **Appendix J**

### **Assorted Floodplain Management Articles**

# **Is it in the Floodplain?**

by  
W. Louis Sidell, Jr.  
Maine State Floodplain Management Coordinator

Have you ever given much thought to how important it is to inform a prospective buyer that the property he or she is interested in may be in a floodplain?

Most prospective buyers do not take time (or know how) to investigate whether a property is subject to a hazard. In many cases a property may not be near a stream or shoreline, past flooding may have been minor, or there may be no history of flooding since the area was settled. As a result, many people are caught by surprise when their property is flooded. One of the best times to advise someone of a flood hazard is at the time they are considering the purchase of property.

The municipal offices and the Maine Floodplain Management Program receive frequent calls these days asking the question – Is my property in the floodplain? Many of these inquiries are the result of real estate transactions. The lending institution making the loan is required to protect the loan with National Flood Insurance if the footprint of the structure is in a flood hazard area as identified on a community's Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map (FHBM). Even though this has been a requirement since 1973, many institutions have paid little attention to it in the past. In the late 80's the Federal instrumentalities i.e. FDIC, OTS, FHA, SBA, etc., have been getting the message to the lending community that they must require flood insurance as a condition of the loan on flood prone structures.

Current Federal law requires only that the lender advise a person of the flood hazard and the need to purchase flood insurance within a reasonable time prior to the closing on the loan. This could be well after the buyer has put down earnest money, has lost interest in other properties, and has otherwise become committed to purchasing a property without knowing all the facts. In many states a buyer has recourse under consumer protection laws.

The information for making a determination is available. Approximately 93% of the Maine communities participate in the National Flood Insurance Program (NFIP) and nearly all of Maine's communities have been evaluated as to identifying the flood risk on maps provided to the communities by the Federal Emergency Management Agency (FEMA). These maps are called FIRMs or in some cases FHBMs. Most of the towns have these maps on file in the town office since the maps are an integral part of the Town's Floodplain Management Ordinance. The Regional Planning Commissions around the state also have copies of these maps as well as the State Floodplain Management Program within the State Planning Office in Augusta.

Most towns will not make the determination for you but many will make the map available for your inspection and may help in making the determination. One thing that none of us can do is to make a floodplain determination over the telephone. Because of the possibility of errors in communication over the phone, towns have been advised not to make determinations over the phone unless they feel comfortable with the information being provided by the caller. The FIRMs do not contain individual parcel boundaries and must be used in conjunction with a boundary map or a tax map. If you can read a map and know where the structure is located on the lot, it is not that difficult to make a determination.

The FIRMs can also be ordered from FEMA's map distribution center. There is a nominal charge for the maps, but if you handle a particular region it may well be worth the investment to purchase the maps. The minimum fee is \$2.00 per panel plus shipping. To order the maps you can call 1-800-358-9616 or Fax (800) 358-9620 or you can write: FEMA/NFIP Map Service Center, P.O. Box 1038, Jessup, Maryland 20794-1038.

One of the other benefits of flood hazard disclosure is a possibility for a community to get credit points under an insurance rating system. The Community Rating System allows points for communities that provide initiatives to reduce future flooding damages. If enough credit points are earned, it will result in reduced flood insurance premiums for the residents within that community. Credit is provided if flood hazard disclosure is contained in the real estate listings and if real estate agents advise prospective property purchasers that the property is located in a Special Flood Hazard Area. Other disclosure methods may also be credited.

The objective of the disclosure is to prevent all the troubles that can arise from failing to advise potential purchasers of a flood hazard. In some cases, such a program may protect the real estate agents and sellers from lawsuits. In many cases, it will prevent unwise development of vacant floodprone land.

It is my opinion that it is time for all Maine real estate professionals to implement the flood hazard disclosure and provide a service to the community. For more information please contact The Maine Floodplain Management Program at the State Planning Office, 38 State House Station, Augusta, ME 04333-0038. The phone number is (207) 287-3261.

# WHAT IF I SUBDIVIDE IN THE FLOODPLAIN?

by

W. Louis Sidell, Jr.

State Floodplain Management Coordinator

For some time now I have suspected that the problem was bigger than I wanted to admit. Now all the indicators are proving my concerns to be valid.

The problem is that many communities, surveyors and applicants are not consistently following the subdivision review criteria that pertain to land areas that fall within identified Special Flood Hazard Areas also known as the 100-year floodplain.

The State's subdivision review criteria is contained in Title 30-A M.R.S.A. §4404(13). It reads as follows:

**13. Flood areas.** [The municipal reviewing authority must determine that] Based on the Federal Emergency Management Agency's Flood Boundary and Floodway Maps and Flood Insurance Rate Maps, and information presented by the applicant whether the subdivision is in a flood-prone area. If the subdivision, or any part of it, is in such an area, the subdivider shall determine the 100-year flood elevation and flood hazard boundaries within the subdivision. The proposed subdivision plan must include a condition of plan approval requiring that principal structures in the subdivision will be constructed with their lowest floor, including the basement, at least one foot above the 100-year flood elevation;

The Maine Model Floodplain Management Ordinance provides the following:

The Planning Board shall, when reviewing subdivisions and other proposed developments that require review under other federal law, state law or local ordinances or regulations and all projects on 5 or more acres, or in the case of manufactured home parks divided into two or more lots, assure that:

- A. All such proposals are consistent with the need to minimize flood damage.
- B. All public utilities and facilities, such as sewer, gas, electrical and water systems are located and constructed to minimize or eliminate flood damages.
- C. Adequate drainage is provided so as to reduce exposure to flood hazards.
- D. All proposals include base flood elevation and, in riverine floodplain, floodway data.
- E. Any proposed development plan shall include a statement that the developer will require that structures on lots in the development be constructed in accordance with Article VI of this ordinance and that such requirement will be included in any deed, lease, purchase and sale agreement, or document transferring or expressing an intent to transfer any interest in real estate or structure, including but not limited to a time- share interest. The statement shall clearly articulate that the municipality may enforce any violation of the construction requirement and that fact shall also be included in the deed or any other document previously described. The construction requirement shall also be clearly stated on any map, plat, or plan to be signed by the Planning Board or local reviewing authority as part of the approval process.

The problem first came to my attention as a result of some of the Community Assistance Visits and workshops I have conducted around the State. Then a surveyor called to my attention the fact that a vast majority of the subdivisions he had come across while doing Mortgage Inspections had areas within the

floodplain but had been reviewed & approved without the required floodplain data or required construction standards and deed restrictions placed on the affected lots, i.e., the required floodplain boundary nor the notice of lowest floor elevation.

I discussed this issue with the Attorney General's (AG's) Office and with the Maine Municipal Association (MMA). The conclusions were the same from both agencies. We appear to have a subdivision compliance problem.

Both agencies agree that a town could be sued for failure to attach the requisite conditions to a subdivision permit. Buyers of lots in subdivisions which are granted approval without the conditions may have either a real flood hazard or at the very least a cloud on their title.

Financing a structure that has been identified as being in a Special Flood Hazard Area has added difficulties. In order to get financing from a federally regulated lender, i.e. a bank insured by the FDIC, flood insurance must be purchased as a condition of the loan by federal law. If the community does not participate in the National Flood Insurance Program (NFIP) it becomes difficult if not impossible to get financing. Buyers of lots in floodplains should be finding out about the potential hazards and restrictions that may be associated with the property long before they get to the bank.

Another issue in the State's subdivision review criteria, item number 13, involves the language that states, "The subdivider shall determine the 100-year flood elevation and flood hazard boundaries within the subdivision." Often the Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map (FHBM) that is involved does not provide a base flood elevation for easy reference and mapping when the applicant needs to put the 100-year boundary and elevation on the subdivision plat. MMA concurs with the State Floodplain Management Coordinator's opinion that if the map has an unnumbered A Zone (a mapped floodplain with no associated flood elevation) then it is the developer's (applicant's) responsibility to determine the 100-year flood elevation. This requires the additional expense of hiring an engineer or hydrologist. Although the law does not stipulate how the developer is to determine the 100-year flood elevation, I would add that it is in the town's and the developer's best interest to make the determination based on engineering practices recognized by the Federal Emergency Management Agency (FEMA). That way if the data is credible there is a possibility that we can convince FEMA to revise the Flood Insurance Rate Map (FIRM) for the community based on the existing data. This will not only benefit the community in other permitting functions but may assist surveyors when doing future map determinations on other local properties for lending institutions and/or homeowners.

To date, I am aware of only two Maine communities that have actually "recalled" an already approved subdivision once they learned of the omitted requirements. In one case, lots had already been sold. If you have a situation in your town where a subdivision has been approved contrary to the requirements I recommend that you call your town attorney to discuss the proper procedure for handling such issues.

MMA has offered the following "boilerplate" condition of approval as contemplated by 30-A M.R.S.A. §4404 (13):

This approval is granted subject to the following condition(s):

1. If this plan shows the subdivision or any portion of it to be within a flood hazard area, all principal structures hereafter constructed or placed therein shall be so located that their lowest floor, including basement, is at least one foot above the 100-year flood elevation.

MMA further recommended that such language would be most appropriate if located near the signature block on the recording plat.

It should be noted that under the NFIP the Federal government establishes the minimum standards for development in the Special Flood Hazard Areas. States can be more restrictive in their regulations and the communities in turn can be more restrictive than the Federal or state standards. This is certainly the way it is working in Maine. The standard in Maine's model Floodplain Management Ordinance is slightly more restrictive than the Federal regulation found in the NFIP Regulations at 44 CFR Part 60.3(a) (4) and 60.3(b) (3). The NFIP Regulations only place the base flood elevation data requirement on subdivisions or other proposed developments of greater than 50 lots or 5 acres, whichever is the lesser. Maine's requirement is by choice more restrictive. You may find in some instances that the community has opted to be even more restrictive. It pays to check with each community to see what its ordinance requires.

If you have any floodplain management questions they should be directed to the staff of the Maine Floodplain Management Program:

Lou Sidell, State Floodplain Management Coordinator	(207) 287-8063
Bonnie Cowle, Map Mod Coordinator	(207) 287-8052
Sue Baker, Planner	(207) 287-8051
Brigitte Ndikum-Nyada, Research Associate	(207) 287-8932

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38 State House Station  
Augusta, Maine 04333-0038  
(207) 287-3261

# THEY JUST DON'T GET IT

By

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Maine Floodplain Management Coordinator

I don't know if you saw the recent piece on NBC's *Fleeing of America*, but for the second time in a month, NBC took a major swing at the National Flood Insurance Program. Aside from some very misleading "reporting", I think they are completely missing the concept of what the NFIP has done to mitigate flood damages.

According to the February 24<sup>th</sup> evening report, the NFIP is fleecing the American Taxpayer because there are insured individuals that are getting flooded, suffering damages and cashing in on claims to repair their home exactly the way it was, and then doing it all over again a few months later. Admittedly we have a problem with repetitive losses. But let's get the story straight. FEMA, Congress and communities are working to turn this problem around.

The National Flood Insurance Program is the Granddaddy of the oft' touted mitigation measures. Congress passed the National Flood Insurance Act in 1968 and laid the ground work for a program that has had many great successes. It is, like all programs, not perfect, but it is a Program that has been flexible to the changing needs of the policy holders, the communities, and states in efforts to break the flood/rebuild/flood cycle that has for years plagued society.

The major underlying purpose of the NFIP is to break the cycle. Flood insurance is made available in those communities that have agreed to regulate development in Special Flood Hazard Areas. In addition, by creating an insurance pool fed by those that are at risk, the cost of the risk is taken off the backs of the taxpayer and is funded by those paying the premiums.

The NFIP is not a taxpayer burden. The Program is designed to operate in the black during a normal loss year. This is to say that the Program runs on Flood Insurance premium income, not taxpayer money out of the U. S. Treasury. When the Program has an unusually heavy year in losses, it can and does borrow from the treasury. But it is paid back with interest.

According to a recent FEMA press release, dated February 24, 1998, FEMA Director James Lee Witt is quoted, "flood insurance claims and operating expenses are funded by policyholder premiums, not by tax dollars. We estimate that the NFIP saves an estimated \$800 million annually in taxpayer dollars that would otherwise be spent on flood disasters."

Witt pointed out that part of the savings comes from reduction in flood damage due to NFIP building standards. He said government data shows that structures built after a community joins the NFIP are 75 percent less likely to suffer flood damage than those built before those standards were adopted.

For over 25 years now, the NFIP has required new buildings to be elevated or floodproofed to a 100-year flood design standard. Over 18,700 communities have decided to participate in the National Flood Program and their ordinances reflect this requirement.

In addition it has been a long standing NFIP development requirement for local ordinances to reflect that, if a structure is substantially damaged or improved, it must be made flood resistant. This usually translates into elevating the building with its lowest floor above the 100-year flood elevation. Substantially damaged buildings also qualify for FEMA-funded acquisition or relocation programs. The NFIP policy holders fund many of these projects. FEMA and Congress have pumped additional money into efforts to move buildings out of harms way. It is unrealistic, however, to expect overnight elimination of the problem. We didn't get into this problem overnight.

It is unfortunate that shortsighted reporting continues to feed a public perception that all government programs are big, bad and wasteful when in fact here is a program that is saving the U.S. taxpayer money and who knows, maybe even saving a few lives by encouraging people to build smart.

# **HUGO'S LESSONS ON CONSTRUCTION NFIP STANDARDS WORK**

by

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If there is any good news to come out of the Hurricane Hugo, it may be that the National Flood Insurance Program (NFIP) standards for construction in high hazard coastal areas, Zones V, V1-30 or VE do work. On more than one occasion in South Carolina a house was left standing next to one that was totally destroyed. It was not an error on nature's part. She really tried to demolish everything in her path with winds exceeding 100 mph and storm surges in excess of 15 feet in some areas.

The houses left standing in these unusual circumstances were built to meet the minimum standards of the Coastal Construction Manual, a Federal Emergency Management Agency (FEMA) publication, (FEMA-55/February, 1986). In a few instances there were reports that houses built in communities that did not adequately enforce their ordinances did not survive the storm. At the National Committee on Property Insurance (NCPI) <sup>1</sup> Annual forum in December of 1995, Dr. Neil Frank, the famed meteorologist and hurricane authority, and Billy Manning, Director of Engineering and Education for the Southern Building Code Congress, gave several examples of structural failure during hurricanes. Several examples were shown where the mechanical fasteners (hurricane clips) were undersized or in some cases the clips were not corrosion resistant and the salty environment had substantially reduced their strength and they subsequently failed in the high winds. In other examples, the clips were too light or not sized properly to the job. Inadequate bracing was another common failure. A frequent code deficiency was lack of exterior wall fastening requirements. Adequate codes and proper inspection during construction was the key to many of those that survived not only Hugo but prior hurricanes as well. It was found after some of the buildings were destroyed that they were not built as engineered. Someone tried to save a buck and shave corners. One of the most severe code deficiencies pointed out at this one day meeting was the lack of standards for the proper erection of signs. They were often cited as the source of significant damage because they turn into missiles during high winds.



# **COMMON COMMUNITY ERRORS IN FLOODPLAIN MANAGEMENT**

by  
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One of the many responsibilities of the State Floodplain Management Program is to conduct Community Assistance Contact (CACs) and Community Assistance Visits (CAVs). The purpose of these calls and visits is to assess the community's floodplain management program and to determine if the community is having any problem with administering or enforcing it. For the most part Maine communities take their responsibilities seriously and they believe in sound floodplain management. However, there are some problems that occur more frequently than others.

Communities should require permits for all development in the floodplain. A few communities were under the impression that permits were only required for substantial improvements. It might be wise to sit down and read the floodplain management ordinance definition of development. It is a very broad definition, and, for those communities that have adopted the Model Ordinance, a permit is required for all development.

Permit record keeping is another problem. In order to properly rate structures for insurance coverage, one of the most important sources of information is the community's floodplain permit records. This record should show:

1. When the structure was built. This is necessary to determine which rating table to use, Pre-FIRM (before the effective date of the FIRM Map) or Post FIRM (after the effective date of the FIRM Map).
2. Is the structure in the floodplain and if it is, what is the zone and the Base Flood Elevation (BFE)?
3. What is the lowest floor elevation? This is the most critical of records to keep and to be able to retrieve when requested. Elevation Certificates are required in order to close out a floodplain permit for structures. These certificates are necessary to rate new construction. Note that the lowest floor means the floor of any enclosed area over 3 feet in depth.

Keep in mind that structures which are non-compliant may be denied coverage or those built as a result of a variance may end up paying exorbitant rates that may seriously affect the market value, because the prospective purchaser may be required to buy flood insurance as a condition of the loan.

If you have a problem understanding your ordinance or how to apply it to certain circumstances, call the Maine Floodplain Management Program at the State Planning Office. The number is 287-3261.

# Flood Hazard Determination Issues

## So they say you are in the Flood Zone!

The Federal Emergency Management Agency, or FEMA, has studied and mapped the floodplains of the United States and delineated them as 'Special Flood Hazard Areas' (100-year floodplains) on county/community Flood Insurance Rate Maps (FIRMs). In Maine, these maps are published for each separate city and town except in areas where FEMA deemed there was not enough risk or development to warrant the cost of mapping. The maps, which show roads, waterbodies, and the shaded floodplains zones, are used by the local officials of communities that participate in the National Flood Insurance Program for land use and permitting purposes. They are also used by lenders for making map determinations, and by insurance agents for rating flood insurance policies. Most FIRMs are based on a detailed flood study, however, there are a number of Maine communities where full studies have not been completed, and less technical data has been used to map the floodplains. The FIRMs are reasonably successful in showing the areas determined to be within the 100-year floodplain, sometimes however, they contain inadvertent errors. This is often caused by the lack of availability of a highly detailed base map, map scale, and changes to the landscape, not necessarily by the lack of quality of the actual flood data. As with any mapping process, occasionally there are errors. FEMA recognizes this potential and has developed a process to deal with this issue.

The Flood Disaster Protection Act of 1973 and the 1994 Reform Act made flood insurance mandatory as a condition of a loan on any structure located within a 100-year floodplain. The lender is responsible for making a flood map determination on every loan for improved real estate (unless the original loan balance is \$5,000 or less and has a repayment term of less than one year). Most lenders contract with a private company to complete these determinations. Most of the companies are very large national firms that do vast numbers of these determinations quickly, cheaply, and without the benefit of local knowledge, i.e., information about where the structure sits on the lot. The lenders and map determination companies must use the current FEMA flood map and make a purely horizontal determination on whether the structure is in, or out of the mapped floodplain. *(For the purpose of these determinations, ground and house elevations at the site may not be taken into consideration.)* The findings of these determinations are sometimes not shared with the borrower until just days or hours before the closing. Often, people are surprised to learn that their property is in a flood zone and that they must purchase a separate flood insurance policy before they can close and continue that coverage for the term of the loan.

## O.K., I agree I'm in the Flood Zone, but how do I get insured?

Flood insurance is NOT covered under a regular Homeowners policy - it must be purchased separately. It is available through any insurance agent/agency, who may write it directly through the National Flood Insurance Program (NFIP) or place the coverage through one of the many "Write Your Own" companies. Many of these WYO companies are the same ones that offer homeowner's policies, but the flood coverage is actually reinsured through the NFIP. Homes built before a community's first FIRM are given a somewhat subsidized rate that is not based on their elevation, but homes built after the first FIRM became available for that town must be rated based on the completion of an Elevation Certificate (FEMA Form 81-31). It is the same form that the local building official requires for the permitting of a newly constructed or substantially improved structure. Completion of the Elevation Certificate requires a Professional Land Surveyor and asks for a variety of elevations at the actual structure, such as lowest floor, lowest adjacent grade, highest adjacent grade, elevation of mechanicals, and of course the elevation of the 'base flood' (100-year flood) as shown on the FIRM.

### No way, I'm not in a flood zone!

It is not a perfect world. As stated earlier, FEMA's maps aren't 100% accurate, and while the vast majority of the determinations done by map determination companies are correct, they can make errors. We recommend the steps outlined in the section below when a flood determination is in question. Methods 1 & 2 apply to those cases where there are problems with the horizontal determination. Only method 3 is appropriate when vertical elevation becomes an issue. [Remember that the lender is only responsible, by federal law, for making a horizontal determination based on the current FIRM and may not base a determination on elevation data, unless a LOMA has been issued based on an Elevation Certificate and other supporting documentation.]

### Inaccurate determinations and how to deal with them!

Here is an example of the type of question that we are so frequently asked:

*"I'm dealing with a situation where a bank is insisting on flood insurance for buildings which are NOT in the shaded flood area shown on the flood map, based on a "flood hazard determination" from out of state. Somehow the bank seems to feel that the opinion of an anonymous computer operator from away is superior to that of a Maine licensed professional who has been to the site. Do the banks have some discretion in this area? Or are they required to proceed this way?"*

Here to fore the Flood Hazard Determination Companies with whom the lending institutions contract, are an unregulated industry. However, the industry has most recently implemented a certification process to improve the quality of their profession. It can be difficult for property owners who are attempting to get (re)mortgages and equity loans to deal with the issues surrounding determinations. There is no one answer to the problem posed above, but rather a list of possible options.

According to the federal regulations under the NFIP governing the lending institution, the ultimate responsibility for flood hazard determinations lies with the lender, even if they subcontract that work out to a vendor. A lender has the legal ability to override an inaccurate determination completed by a vendor if the lender has certifiable information obtained from another source. The standard process that most banks follow is to have their vendor reconsider the determination based on the submission of the additional documentation. In the vast majority of these situations, the issue is resolved satisfactorily.

If the property owner/borrower disagrees with the lender's/vendor's determination there are 3 courses of action [remember only the last method is appropriate when elevation data is to be taken into consideration]:

1) Provide the loan officer with information from a local official and sometimes information from a surveyor, which demonstrates the footprint of the structure is horizontally outside the Special Flood Hazard Area (SFHA). This can be accomplished with a copy of the flood map, tax map, and lot site plan (depending on the closeness of the call this site plan may or may not need surveyed measurements). In some cases it is clearly evident (without extensive surveying) that the structure lies outside the SFHA. In most instances, the lender will forward that information to the map determination company, who will then revise their determination. If not, ask the loan officer to consider the determination and make the decision locally. Some lenders may accept this documentation and fill out their own Flood Hazard Determination Form.

2) There is a Letter of Determination Review (LODR) process, where the lender and property owner agree to submit documentation to FEMA for review. Unfortunately, there is an \$80 fee for this review, which is normally paid by borrower. We usually don't recommend this option because of the fee and because the review only rules on the horizontal determination and will not take into consideration any elevation data.

3) If option 1 & 2 don't work for horizontal disputes, or when a naturally elevated area has been inadvertently included in the mapped floodplain, we recommend that the property owner work with a surveyor to complete an Elevation Certificate and LOMA application for FEMA's review. There is no federal fee for the review or processing of LOMAs. In some extreme cases we have even heard that FEMA might review a LOMA application without elevation information, when it can be clearly shown that the structure is horizontally way outside the floodplain. Certified elevation information is always required when the review is to be based on vertical elevation and not horizontal considerations. Unfortunately the LOMA process can take quite a few weeks (maximum of 60 days if FEMA has all the needed data) and can hold up the closing of a loan. We normally recommend that if the borrower wants or needs to close on the loan, they should go ahead and purchase the flood insurance. If the LOMA is granted, the federal requirement for flood insurance is removed. If a bank has no other internal policy requiring insurance then the coverage may be cancelled and the property owner may receive a full refund.

We encourage the public and other professionals to seek assistance if they question the flood hazard determination for their property. The staff of the Maine Floodplain Management Program is available for providing information and resources regarding these mapping and determination issues. Also, please check out our website for a wealth of information and links [www.maine.gov/spo/flood](http://www.maine.gov/spo/flood). Our site is very comprehensive, containing a multitude of data, forms, publications, and links to such things as: FEMA Forms (Elev. Cert. and LOMA/LOMRs); Best Available Data; View and Print Flood Maps; Development in Approximate A Zone Areas; the Maine Floodplain Management Handbook; and Contact the Maine Floodplain Management Program.

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# Maine Floodplain Management Program

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